CIRM RFA-07-01

APPLICATION # CL1-00524-01

STAFF ANALYSIS

FEASIBILITY:

Project Scope: The project will modify space in a newly-constructed laboratory building to provide improvements identified for the space to function as a shared research laboratory. One laboratory "bay" within a large open laboratory will be partitioned and remodeled to allow placement of equipment and create tissue culture work stations. An existing office will be converted to a tissue culture room as well. The grant proposal includes a Stem Cell Techniques Course, although no renovation funds are proposed for the course, only equipment funds. The description of the work is very detailed and explains all required modifications to this newly constructed space to accommodate the new function. Aside from the partitioning planned within the open laboratory, the majority of the work relates to casework and building system modifications to accommodate the new equipment that will be installed in the new shared laboratory. The plans provided in support of the project are fully developed architectural design development drawings with all design issues resolved including circulation and equipment placement.

The proposed improvements involve 1,506 gross square feet (gsf) encompassing 1,262 assignable square feet (asf). The difference between gross and assignable would be the thickness of the walls, circulation and non-assignable space involved in the project. A rough take-off from the drawings confirmed the square footages provided.

Project Management: The proposal identifies construction management processes that are in place at the institution with appropriate institutional management support.

COST:

A lump-sum budget amount of $285,500 is provided for the planned renovations for the shared laboratory. (The majority of the grant request is for equipment funding consisting of $1,324,500 for the shared laboratory and $498,300 for the Stem Cell Techniques Course.) An additional amount of $113,800 is budgeted for institutional work which includes fixed equipment and furnishings (for items costing less than $5,000). Furnishings, however, would not qualify as either laboratory alteration or equipment costs. Funding for such items is normally budgeted with the supplies component under Part 1, as items under $5,000 would not be capitalized or depreciated under current costing guidelines. Therefore the proposal includes $19,200 in unallowable costs for furnishings. The design fees, administrative costs and project contingency of $124,000 represent 31 percent of the construction amount which is higher than the RFA budget guidelines of 25 percent by $24,175. Thus, there is a total of $43,375 of unallowable

costs included in the proposal. The implications of these unallowable costs are discussed further under the institutional commitment section of the analysis.

The overall cost per asf for the renovation work is $415. To convert this to a comparable figure for gross square feet (gsf) in a typical research-intensive building, one would assume an overall building efficiency of assignable-to-gross area of 60 percent. Thus, the 1,262 asf would equate to 2,103 gsf considering the full complement of building space (e.g. the gross building area including circulation and support) constructed to support the area to be renovated. Using this calculated gross area, the cost per gsf would amount to $249/gsf. This provides a more meaningful comparison to new laboratory building construction costs. We conclude that the average cost for new laboratory construction would be about $600/gsf, excluding land and site utilities. This amount would vary widely within California, but is being used here as an indicator of new construction value for comparative purposes. Based on this comparison, we conclude that the renovation work represents about 42 percent of the cost of new laboratory space. Capital funding guidelines indicate that costs should not exceed about 65 percent of new construction in order to be considered a reasonably good investment to provide new hESC laboratory space.

The applicant indicates that the shared laboratory would be able to accommodate the NIH-free laboratory space needs for 21 Principal Investigators (PIs) at this institution along with several PIs at other institutions. However, some of the PIs that are to use this facility are located at institutions that have also requested a shared research laboratory grant. If one considers only the institutional-based PIs, the cost per PI would be about $25,000. Based on CIRM funding only (construction and equipment) the cost per institutional-based PI is $68,076.

The applicant has also committed to addressing any cost overrun.

TIMELINE:

The project schedule indicates that preliminary plans and working drawings will be completed in October 2007 based on an August 1, 2007 award date. Construction-related activities and equipment installation will be completed in February 2008, indicating completion of the project in about five months from the grant award date.

INSTITUTIONAL COMMITMENT:

A combined institutional matching amount of $683,500 is noted for the requested CIRM funds for the shared laboratory renovation grant ($429,600), shared laboratory equipment grant ($1,000,000) and the stem cell techniques course equipment grant ($498,300). This match amount represents 35 percent of the requested CIRM funding and exceeds the

minimum matching requirement of 20 percent of the CIRM grant amount. The cited matching amount consists of two components:

- $359,000 represents 20 percent of the value of "$1,795,130 in sophisticated analytical equipment that was purchased in 2006 using private funding sources that we believe will complement the goals and extend the capabilities of the SRL. We intend to make this equipment available one day a week (20% time) to SRL investigators, giving a match of $359,000."

- $324,500 is institutional funding for equipment purchases in excess of the $1 million in CIRM funding.

As noted under the cost analysis section, the proposal includes unallowable costs amounting to $43,375. To resolve this unallowable cost, the applicants matching amount would need to reflect at least the sum of (1) the minimum matching requirement of 20 percent based on allowable costs and (2) 100 percent of the unallowable amount. In this case, the minimum matching amount for the lab, equipment and course would be $420,280 representing the sum of (1) 20 percent of the allowable grant amount of $1,884,525, or $376,905, and (2) 100 percent of the $43,375.

If both components of the matching amount are accepted, there is a sufficient matching amount in the proposal. However, it is unclear to what extent the high-value equipment cited by the applicant would actually be used in hESC research activities, and therefore, this component of the matching amount may not be appropriate.

HISTORICAL PERFORMANCE:

Data for three projects undertaken between 2004 and 2006 and ranging in cost from $70,000 to $180,000 were submitted for historical performance information. In all three cases, the actual project costs were lower than the original budget, ranging from 2 percent to 5 percent below budget. The actual completion dates for the three projects were within three weeks of the scheduled completion dates.

The applicant indicates that there has been nine renovation project undertaken in the last two years with a combined value of $830,000.

RESPONSIVENESS:

Shared Laboratory: The applicant indicates that there are 18 researchers based at the host institution that are planning to undertake hESC research activities once additional NIH-free space is available. An additional 11 PIs are cited as being potential users of the facility. We would note that some of these potential users will overlap with other shared laboratory applications in this area. The scope of work proposed appears reasonable to

accommodate this number of potential users and therefore we would judge the proposal to be responsive to the RFA for shared laboratory use.

Techniques Course: The applicant has requested funding under Part 1 for operation of a shared research laboratory and a techniques course. The Part 2 application proposes grant funding for equipment for the techniques course. Training associated with the techniques course will take place in the shared research laboratory and no additional construction funding has been requested for the techniques course.

Facility Working Group Issues

- **Costs—**How will the Facilities Working Group address unallowable costs included in the grant proposal?

- **Matching Funds--**Should the Facilities Working Group accept 20 percent of the value of high value equipment recently purchased by the applicant that will be made available to shared laboratory users one day a week as matching funds? If not, will the matching funds approved by the Facilities Working Group be sufficient to meet the minimum matching amount and cover unallowed costs?

The grant management office will need to confirm that all conditions of the grant as indicated in the Grants Administration Policy have been met. This would include confirming that all past work is consistent with grant requirements for prevailing wage and other construction-related requirements. This includes confirmation that equipment funds are budgeted pursuant the Grants Administration Policy as adopted December 7, 2006.